

Sea Letter

News & Letter

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An Invitation to Members and Friends: A Celebration of Robert Frost's 97th Birthday Anniversary

Those of us who watched the inauguration of President John F. Kennedy will never forget the part played in that event by the aged poet Robert Frost. It was a singular honor for a great American poet to represent the artists of this country in this important public ceremony. Few of us were aware that it was a son of San Francisco who was so honored.

Robert Frost was born in San Francisco and spent the first eleven years of his life here. According to his daughter, the lecturer and author Mrs. Lesley Frost Ballantine, the poet "remembered San Francisco as one of the most brilliant of cities, in the quality of light

... and his first book poems, *A Boy's Will*, took its title from 'A boy's will is the wind's will,' which reminded him so much of San Francisco."

To commemorate these formative years of Frost's life, the California Friends of Robert Frost have produced a fine documentary film in color, part of which was made in the San Francisco Maritime Museum. The film, made from a script by G. William Gahagen, president of the Frost society, was directed by the young film maker Tom Bullock. At the time of the filming, Mr. Gahagen promised a special showing for our members.

His promise is to be fulfilled on Thursday evening, March 25 at 8 p.m. *Once by the Pacific* will be shown at a meeting to which members and their friends are cordially invited. Refreshments will be served after the showing. We look forward to this very special gathering, and are extremely grateful to the Friends of Robert Frost for making it possible.

An Honor for the Director of the Maritime Museum

The California Historical Society, at their annual awards meeting in Pasadena on February 6, 1971, conferred a signal honor upon Karl Kortum, our Director. He was elected a Fellow of the Society, a distinction awarded for outstanding work in the field of California history.

Eppleton Hall's "Grasshopper" Engines

We are indebted to William Sawyer for the drawing and text featured on pages 2 and 3 of this issue of *Newsletter*.

Mr. Sawyer is a young steam buff who has spent many hours in our library researching early steam engines.

We are grateful indeed to Bill for his drawing and explanation of the *Eppleton Hall's* unusual engines.



Robert and Jeanie Frost, c. 1879

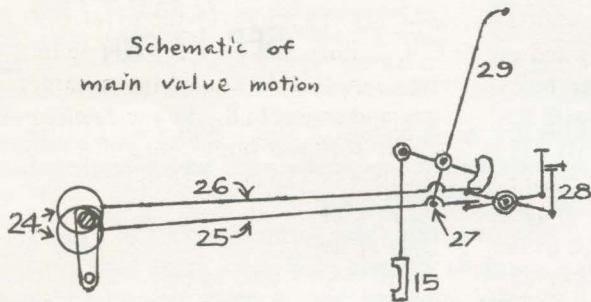
GRASSHOPPER ENGINE

Cylinder 30" dia X 51" stroke

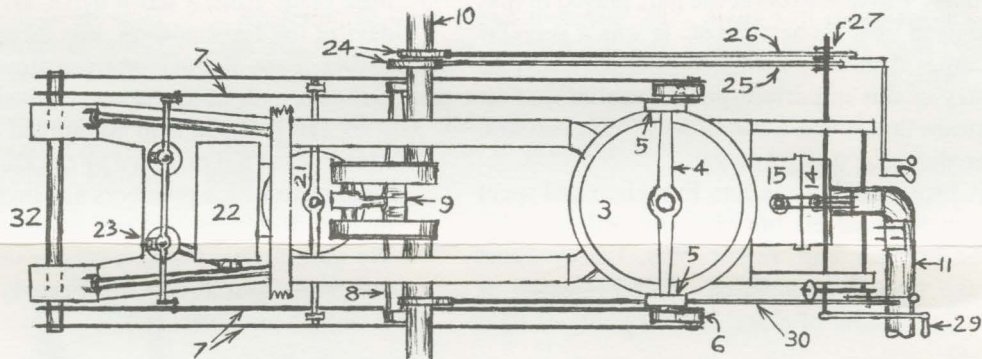
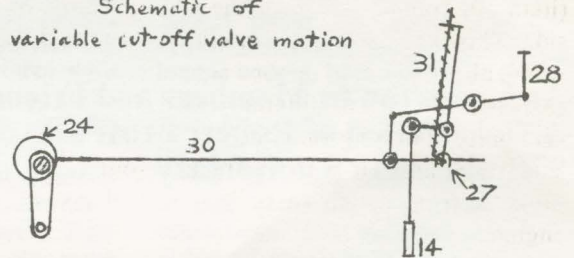
Starboard engine of Steam Paddle Tug Eppleton Hall (100'6" X 21'1" X 10'10" depth, 166 G.T.) built in England 1914

With two return flue boilers, feathering side wheels, variable cut-off and jet condenser

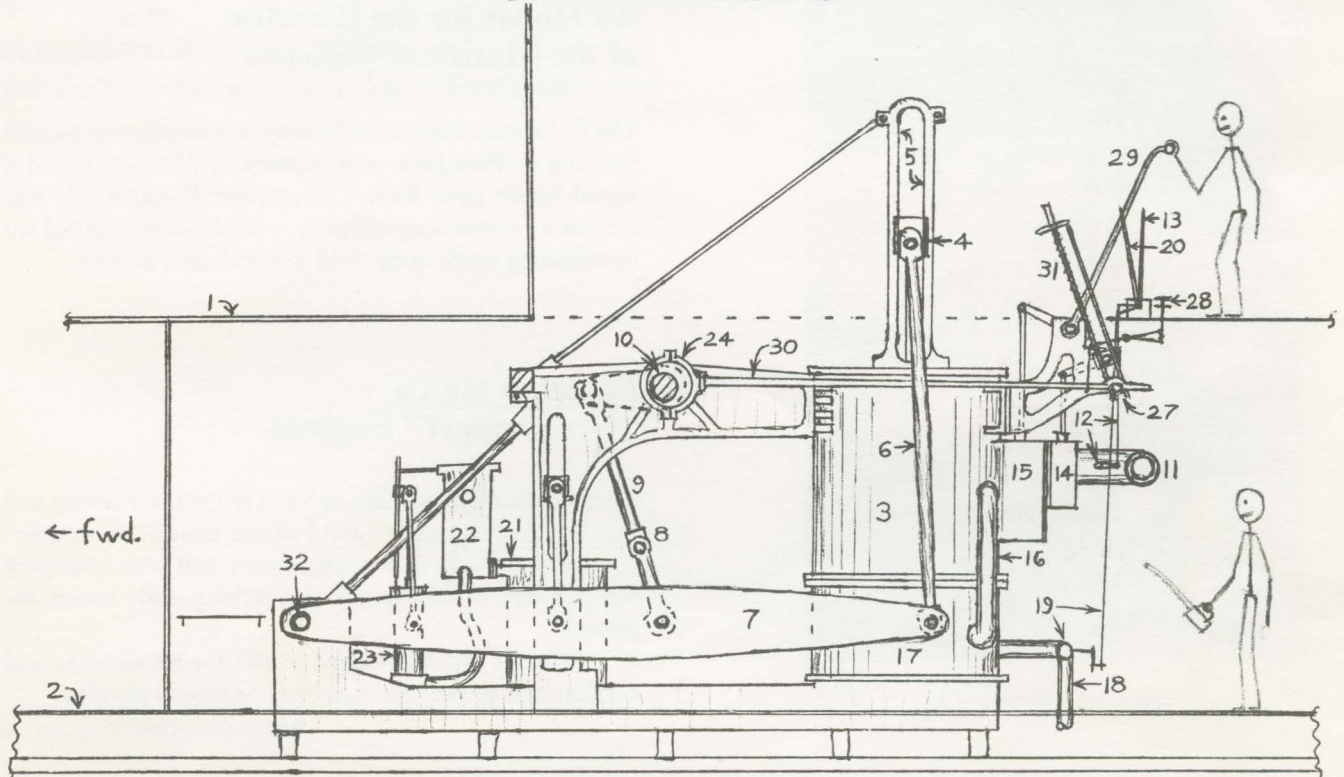
Schematic of
main valve motion



Schematic of
variable cut-off valve motion



Above-view from above
Below-view from the side



The "Grasshopper" Engines of Eppleton Hall

by William D. Sawyer

The paddle wheel tug *Eppleton Hall*, which arrived here from England in March of last year, is a very remarkable and (to us) very unusual vessel. The most remarkable items aboard her are surely the steam engines which power her. The drawing (left) shows one of a pair which are arranged side by side amidships. The crankshaft (item 10) connects both to the paddle wheels on either side. This shaft has a joint or clutch between the engines which allows them to be used separately. This allows the sidewheels to turn at different speeds for greater maneuverability. On long runs the two engines turn together. They are supplied with steam at about thirty pounds pressure from a pair of boilers located just aft of the engines.

Each of these "grasshopper" engines has a single vertical cylinder (3). The piston within connects to a pair of rods (6) which drop down on either side of the cylinder.

These pull one end of a pair of beams (7) up and down. The beams transmit power to the main rod (9), which turns the crankshaft (10). The "drop hook" valve gear (24-31), which runs the valves (14 and 15) that distribute the steam, must be worked by hand (29) to start the engine. When the engine reaches her regular running speed, one of the hooks (27) is dropped and the engine runs her own valves.

This entire design dates prior to 1850 and is almost unknown in American tugs. Tugs used on the River Tyne in England in the 19th century had one such engine in a wooden hull. In later years this developed into a larger type, with two engines and a steel hull, like the *Eppleton Hall*. By 1914, when the *Hall* was built, more advanced steam engines were available. The use of such an ancient design may be due to ease of maintenance, lower building cost or local conservatism.

The acquisition of this vessel and her unusual engines by the Maritime Museum is a welcome event, and their preservation in running order will be earnestly anticipated.

GRASSHOPPER ENGINE OF TUG EPPLETON HALL

Key to Numbers

- | | |
|--|--|
| 1. Main deck | 17. Condenser - jet type |
| 2. Lower deck | 18. Injection line |
| 3. Cylinder | 19. Injection valve & rod |
| 4. Crosshead | 20. Injection lever |
| 5. Crosshead guides | 21. Condensate or air pump |
| 6. Connecting rods | 22. Hot Well |
| 7. Beams | 23. Boiler feed pump |
| 8. Cross foot | 24. Eccentrics |
| 9. Main rod | 25. Forward eccentric rod |
| 10. Crank shaft - connects to sidewheels | 26. Backward eccentric rod |
| 11. Steam line | 27. Drop hooks or gabs |
| 12. Throttle valve & rod | 28. Pedals to raise or lower hooks |
| 13. Throttle lever | 29. Starting bar |
| 14. Cutoff valve | 30. Cutoff eccentric rod (hook on end) |
| 15. Slide ("d") valve | 31. Screw to adjust cutoff point |
| 16. Exhaust line | 32. Trunnion - fixed point of beams |

World of Books

—From the San Francisco *Chronicle*, December 14, 1970



Maritime Saga In Baja California

—William Hogan

ABOUT HALFWAY up the gulf coast of Baja California, Santa Rosalia was hardly one of the world's great seaports. But deposits of high grade copper ore had been discovered there. European firms erected a smelter in the ramshackle town that demanded coke and coal to feed it. By 1914, just months before the first World War broke out, a fleet of big Hamburg Cape Horners was chartered to haul this fuel from Europe. The parade to the Pacific lengthened as remote and barren Santa Rosalia became an important shipping center.

This is the setting for one of the most remarkable maritime histories of recent years. Titled *"To Santa Rosalia Further and Back,"* it is the result of massive research here and abroad over several years by the Mill Valley master mariner and marine historian Harold D. Huycke

BASICALLY, it is the tale of what, in an introduction here, Alan Villiers describes "as fine a fleet of big square-rigged ships as managed to survive the first World War." A dozen of them were ordered by their owners to lay up in the California Gulf, or Sea of Cortez, until the incipient hostilities blew over.

But the war dragged on. And so did the bottled-up fleet of these massively-built, massively-rigged merchant vessels. They remained under the hot Baja sun, some indeed for as long as ten years.

Members of their crews deserted, by ones and pairs. The boy seamen who had signed on in Hamburg *"To Santa Rosalia further and back"* did not dare to leave. With their officers and under spare rations they did their best to preserve the ships.

Captain Huycke has traced the story over more than a half century, in cooperation with the German Hydrographic Institute, in interviews with survivors, in personal logs and diaries. The result is only a fine bit of detective work on the last of these ships, but the personal odyssey of the men in them who, like their vessels, tended to rot over the years in the shadow of a Mexican copper smelter.

★ ★ ★

WE FOLLOW the ships in later decades. Some were sold to the old Robert Dollar Co., others ended up as Crown Zellerbach barges in British Columbia waters. With change of hands, and flags, came a change of names for each ship. Most were reduced to carrying hog fuel and logs.

This is a long labor of love and an important piece of West Coast maritime scholarship. It is narrated with zest and historical erudition in a style that reminds me of such Alan Villiers classics as *"Falmouth for Orders"* and *"By Way of Cape Horn."* It is published by Mariners Museum, Newport News, Va. (\$10), an absolute must for collectors of exotic maritime lore.

Available at Museum book shop

News & Letter



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